

Amendments to the Claims:

Please amend claims 1-57 in accordance with the list of claims that begins on the following page, and which replaces all prior versions of claims in the application.

List of Claims:

1. (currently amended) A [[signal bearing medium]] computer readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, the method comprising the following operations:
  - receiving data;
  - making assessments regarding the data;
  - applying at least one behavioral operator;
  - analyzing the data, wherein the operation of analyzing the data comprises detecting if there are any anomalies in the data;
  - outputting results;
  - receiving feedback concerning system performance; and
  - adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method.
2. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise repeating the receiving data, making assessments, applying, analyzing, outputting, receiving feedback, and adjusting operations.
3. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method involves a neural network, and wherein the at least one parameter is a weight.
4. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is an evolutionary algorithm.
5. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is an evolutionary clustering algorithm.

6. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is reinforcement learning.

7. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is hill-climbing.

8. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is annealing.

9. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the machine learning method is meta-heuristics.

10. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of making assessments regarding the data further comprises making assessments regarding features.

11. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise receiving user knowledge.

12. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of analyzing the data further comprises repeatedly analyzing the data.

13. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of analyzing the data further comprises developing at least one mathematical model to explain outcomes.

14. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 13, wherein the operations further comprise:

using the at least one mathematical model to generate at least one new rule; and

using the at least one new rule as one of the behavioral operators.

15. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 13, wherein the operations further comprise using the at least one mathematical model to delete at least one behavioral operator.

16. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 13, wherein the operations further comprise using the at least one mathematical model to modify at least one behavioral rule.

17. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise performing data integrity testing on a detected anomaly.

18. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise generating an alert concerning a detected anomaly.

19. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise altering at least one operational rule based on a detected anomaly.

20. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise:

- proactively generating at least one suggestion;
- outputting the at least one generated suggestion; and
- soliciting feedback concerning the at least one generated suggestion.

21. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 20, wherein the operations further comprise:

- receiving feedback concerning at least one of the at least one generated suggestions; and

interpreting the feedback received concerning at least one of the at least one generated suggestions.

22. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 20:

wherein the operation of proactively generating at least one suggestion comprises repeatedly generating suggestions; and

wherein the operation of outputting the at least one suggestion comprises outputting each of the generated suggestions.

23. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of receiving data comprises repeatedly receiving data.

24. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the data comprises commercial data.

25. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the data comprises government data.

26. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise:

receiving feedback regarding the outputted results; and

adding at least one new operational rule based on the feedback regarding the outputted results.

27. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operations further comprise:

receiving feedback regarding the outputted results; and

adjusting at least one operational operator based on the feedback received regarding the outputted results.

28. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of outputting results comprises:

outputting rules and results; and

outputting information configured to display the rules and results according to user preferences.

29. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of outputting results comprises outputting information configured to indicate membership in at least one membership function in a plurality of membership functions.

30. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the operation of outputting results comprises outputting information configured to display a plurality of membership functions and an indicator showing a relationship between the results and the membership functions

31. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 30, wherein each membership function in the plurality of membership functions is associated with a respective level of risk.

32. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the risk presented by a shipment.

33. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the risk presented by a shipping container.

34. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the risk that an individual is a terrorist.

35. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the risk associated with a credit transaction.

36. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the risk that cancer is present.

37. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the chances that a person will enjoy dating another person.

38. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 1, wherein the at least one property of the data comprises the chances that a person will enjoy a particular movie.

39. (currently amended) A [[signal bearing medium]] computer readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, the method comprising the following operations:

- receiving data;
- making assessments regarding the data;
- applying at least one behavioral operator;
- outputting results;
- receiving feedback regarding the outputted results;
- adjusting at least one behavioral operator based on the feedback received regarding the outputted results; and
- analyzing the data, wherein the operation of analyzing the data comprises generating at least one machine generated mathematical model to explain outcomes.

40. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 39, wherein the operations further comprise:

- proactively generating at least one suggestion;
- outputting the at least one generated suggestion; and
- soliciting feedback concerning the at least one generated suggestion.

41. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 40, wherein the operations further comprise:

- receiving feedback concerning at least one of the at least one generated suggestions; and
- interpreting the feedback received concerning at least one of the at least one generated suggestions.

42. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 40, wherein the operations further comprise:

- receiving feedback concerning system performance; and
- adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method.

43. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 39, wherein the operation of analyzing the data comprises detecting if there are any anomalies in the data.

44. (currently amended) A [[signal bearing medium]] computer readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, the method comprising the following operations:

- receiving data;
- making assessments regarding the data;
- checking integrity of the data;
- applying at least one behavioral operator;
- using machine learning to detect if there are any anomalies in the data;



outputting results;  
proactively generating at least one suggestion;  
outputting the at least one generated suggestion; and  
soliciting feedback concerning the at least one generated suggestion.

45. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 44, wherein the operations further comprise repeating the receiving data, making assessments, applying, outputting, receiving feedback, and adjusting operations.

46. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 44, wherein the operations further comprise:  
receiving feedback concerning at least one of the at least one generated suggestions; and  
interpreting the feedback received concerning at least one of the at least one generated suggestions.

47. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 44, wherein the operations further comprise:  
receiving feedback concerning system performance; and  
adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method.

48. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 44, wherein the operation of using machine learning to detect if there are any anomalies in the data comprises using evolutionary learning.

49. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 44, wherein the operations further comprise analyzing the data, and wherein the operation of analyzing the data comprises generating at least one machine generated mathematical model to explain outcomes.

50. (currently amended) A [[signal bearing medium]] computer readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, the method comprising the following operations:

- receiving data;
- making assessments regarding features and the data;
- receiving user knowledge;
- applying at least one behavioral operator;
- outputting results;

wherein the operation of outputting results comprises outputting information configured to display a plurality of membership functions and an indicator showing a relationship between the results and the membership functions;

- receiving feedback regarding the outputted results;
- adjusting at least one of the at least one behavioral operators based on the feedback received regarding the outputted results;

adding at least one new behavioral operator based on the feedback received regarding the outputted results;

- analyzing the data;

wherein the operation of analyzing the data comprises developing at least one mathematical model to explain outcomes;

using the at least one mathematical model to generate at least one new behavioral operator;

- including the at least one new behavioral operator in the behavioral operators;
- using the at least one mathematical model to delete at least one behavioral operator;
- using the at least one mathematical model to modify at least one behavioral operator;
- wherein the operation of analyzing the data further comprises detecting if there are any anomalies in the data;

- performing additional data integrity testing on a detected anomaly;
- generating an alert concerning the detected anomaly;
- altering at least one behavioral operator based on the detected anomaly;
- receiving feedback concerning system performance;

adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method;  
proactively generating at least one suggestion;  
outputting the at least one generated suggestion;  
soliciting feedback concerning the at least one generated suggestion;  
receiving feedback concerning at least one of the at least one generated suggestions; and  
interpreting the feedback received concerning at least one of the at least one generated suggestions.

51. (currently amended) A [[signal bearing medium]] computer readable storage medium tangibly embodying machine-readable code executable by a digital processing apparatus for identifying at least one property of data, the code comprising:  
a data integrity module configured to examine integrity of the data;  
a behavioral operator module configured generate and evaluate behavioral operators;  
an anomaly detection module configured to detect anomalies in the data;  
a machine learning module configured to analyze the data; and  
an interface/controller module coupled to the data integrity module, the behavioral operators module, the anomaly detection module, and the machine learning module; wherein the interface/controller module is configured to receive the data.

52. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 51, wherein the interface/controller module is further configured to:  
proactively generate suggestions;  
output the generated suggestions; and  
solicit feedback concerning the generated suggestions.

53. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 52, wherein the interface/controller module is further configured to interpret feedback concerning the generated suggestions.

54. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 51, wherein the interface/controller module is further configured to:

- receive feedback concerning system performance; and
- adjust parameters based on the feedback received concerning system performance.

55. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 51:

- wherein the interface/controller module is further configured to output results and to receive feedback regarding the outputted results; and

- wherein the behavioral operators module is further configured to adjust the behavioral operators based on the feedback received regarding the outputted results.

56. (currently amended) The [[signal bearing medium]] computer readable storage medium of claim 51:

- wherein the interface/controller module is further configured output results and to receive feedback regarding outputted results; and

- wherein the behavioral operators module is further configured to add new behavioral operators based on the feedback received regarding the outputted results.

57. (currently amended) ~~A computer data signal embodied in a carrier wave embodying~~ A computer readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, wherein the method comprises the following operations:

- receiving data;

- making assessments regarding the data;

- applying at least one behavioral operator;

- detecting if there are any anomalies in the data;

- outputting results;

- receiving feedback concerning system performance; and

- adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method.

58. (original) A profiling system, comprising:  
a storage; and  
a processor coupled to the storage, wherein the processor is programmed to perform the following operations:  
receiving data;  
making assessments regarding the data;  
applying at least one behavioral operator;  
outputting results;  
receiving feedback regarding the outputted results;  
adjusting at least one behavioral operator based on the feedback received regarding the outputted results; and  
analyzing the data, wherein the operation of analyzing the data comprises generating at least one machine generated mathematical model to explain outcomes.
59. (original) The profiling system of claim 58, wherein the operations further comprise:  
proactively generating at least one suggestion;  
outputting the at least one generated suggestion; and  
soliciting feedback concerning the at least one generated suggestion.
60. (original) A profiling system, comprising:  
means for receiving data;  
means for making assessments regarding the data;  
means for applying at least one behavioral operator;  
means for outputting results;  
means for receiving feedback concerning system performance;  
means for adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method;  
means for analyzing the data;  
means for proactively generating at least one suggestion;

means for outputting the at least one generated suggestion; and

means for soliciting feedback concerning the at least one generated suggestion.

61. (original) A method for identifying at least one property of data, the method comprising the following operations:

receiving data;

making assessments regarding the data;

applying at least one behavioral operator;

analyzing the data, wherein the operation of analyzing the data comprises detecting if there are any anomalies in the data;

outputting results;

receiving feedback concerning system performance; and

adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method.

62. (original) A method for identifying at least one property of data, the method comprising the following operations:

receiving data;

making assessments regarding the data;

applying at least one behavioral operator;

outputting results;

receiving feedback regarding the outputted results;

adjusting at least one behavioral operator based on the feedback received regarding the outputted results; and

analyzing the data, wherein the operation of analyzing the data comprises generating at least one machine generated mathematical model to explain outcomes.

63. (original) A method for identifying at least one property of data, the method comprising the following operations:

receiving data;

making assessments regarding the data;

checking integrity of the data;  
applying at least one behavioral operator;  
generating at least one machine generated mathematical model to explain outcomes;  
outputting results;  
proactively generating at least one suggestion;  
outputting the at least one generated suggestion; and  
soliciting feedback concerning the at least one generated suggestion.